

AMSCO
Maintenance
Manual

WARMING CABINET
(Fifth Generation)

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Rev. 1

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SUMMARY OF SAFETY PRECAUTIONS

The following are personnel (WARNINGS) and equipment (CAUTIONS) **safety precautions** to be observed when operating or servicing this unit. This is a summary listing of safety precautions appearing in the text. Carefully read them before proceeding to use or service the unit. The precautions are repeated where applicable throughout the manual. Observance of these safety precautions will minimize the risk of personal injury or the possible use of improper maintenance methods which may damage the unit or render it unsafe. It is important to understand that these precautions are not exhaustive. AMSCO could not possibly know, evaluate and advise maintenance departments of all conceivable ways in which maintenance might be done or the possible hazardous consequences of each way.

The operation and maintenance procedures recommended by AMSCO are described in this manual. Only these recommended maintenance procedures should be followed.

WARNINGS:

BURN HAZARD: DO NOT EXCEED 150° F FOR NON-VENTED CLOSURES (screw caps, crimp seals, plastic pouches, etc.). Do not exceed presterile solution manufacturer's temperature requirements.

BURN HAZARD: DO NOT RAISE SET TEMPERATURE TO INCREASE RATE OF HEATING. Allow approximately 6 hours for solutions to reach desired temperature.

BURN HAZARD: DO NOT USE LIQUIDS ON - OR INJECT IN - LIVING TISSUE unless actual liquid temperature has been measured and is acceptable. Temperature of warming cabinet contents may be hotter than the displayed chamber air temperature. For patient safety, in accordance with good medical practice, always check liquid temperature prior to using.

INJURY HAZARD: TURN POWER SWITCH OFF AND ALLOW THE CHAMBER TO COOL before starting any maintenance operation.

INJURY HAZARD: REPAIRS AND ADJUSTMENTS, other than those described in these instructions, should be attempted only by experienced mechanics fully acquainted with this equipment. Use of inexperienced, unqualified persons to work on the equipment or the installation of unauthorized parts could cause personal injury or result in costly damage.

CAUTIONS:

When using cleaners such as AMSCO Stainless Steel Cleaner and Polish or AMSCO Pry Cleaner, rub in a back-and-forth motion (in the same direction as the surface grain). Do not rub in a rotary or circular motion. Do not use these cleaners on plastic surfaces.

SECTION 1

GENERAL INFORMATION

The product literature included in this section contains factual data relating to the principle descriptive and identifying characteristics of particulars for WARMING CABINETS. The literature is informational rather than instructional. It provides and conveys, textually and illustratively, a general concept of the equipment, its purpose, capabilities, limitations and technical specifications.

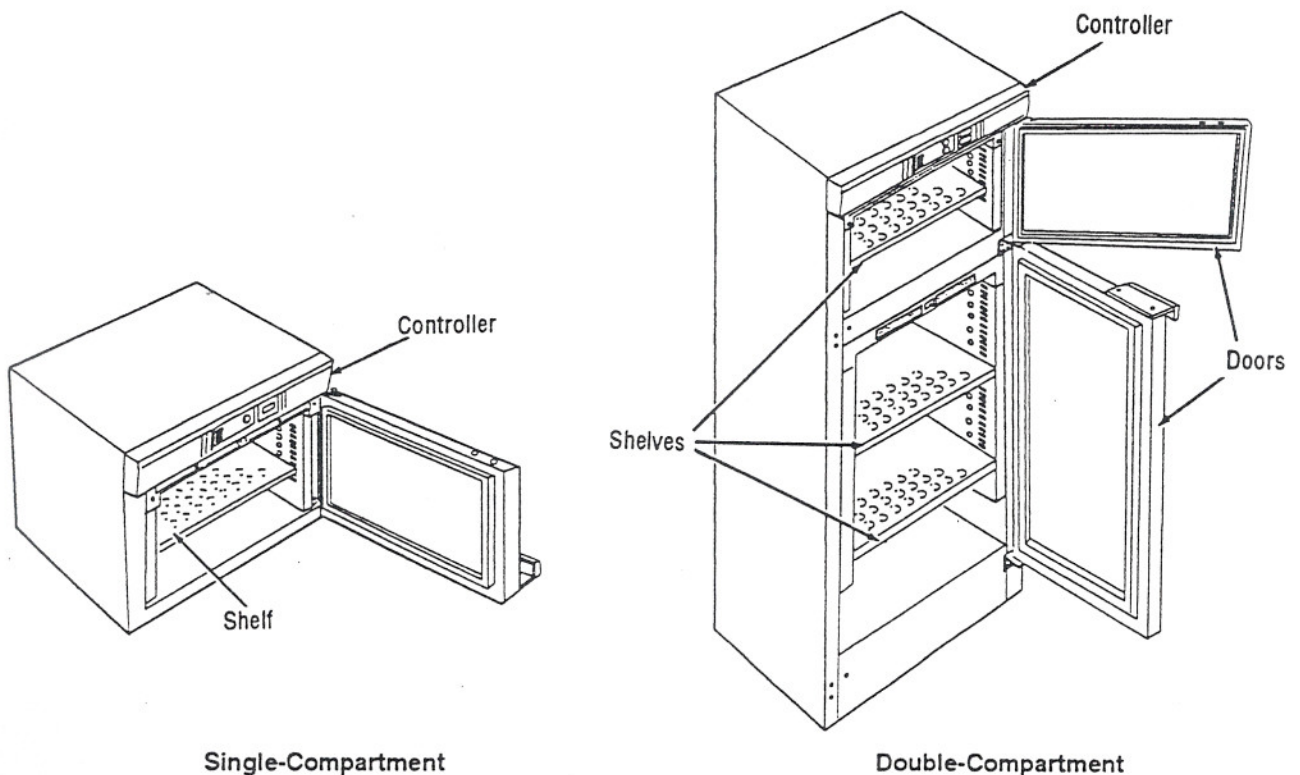


Figure 1-1. WARMING CABINET.

APPLICATION

Cabinet is designed to raise the temperature of surgical irrigation solutions and/or blankets to an acceptable level for hospital and surgical outpatient center applications.

FEATURES

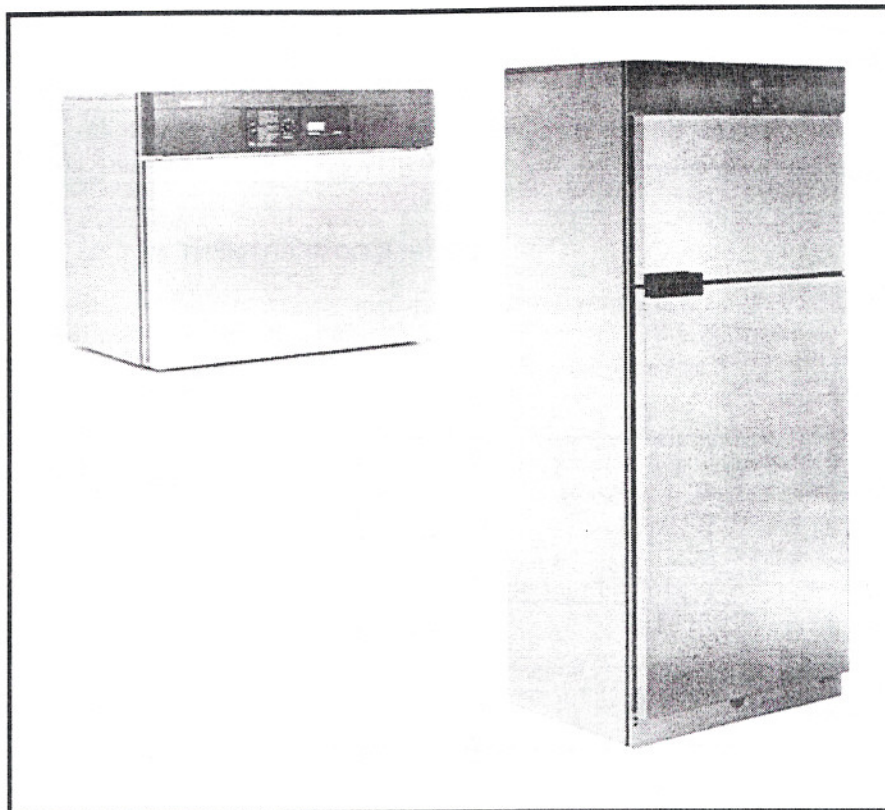
Single-Compartment Model: Features a heating chamber in two capacities; 18" (457 mm) or 24" (610 mm) deep.

Double-Compartment Model: Features an upper and lower heating chamber with independent temperature controls and a choice of two capacities; 18" (457 mm) or 24" (610 mm) deep.

Cabinet Storage Capabilities: The upper cabinet of the 18" (457 mm) deep model holds up to 15 (2-liter) surgical flasks. The lower cabinet of the 18" (457 mm) deep model holds up to 45 (2-liter) surgical flasks.

The upper cabinet of the 24" (610 mm) deep model holds up to 20 (2-liter) surgical flasks. The lower cabinet of the 24" (610 mm) deep model holds up to 60 (2-liter) surgical flasks.

All chambers can hold a combination of flasks and dry goods or dry goods only.



STANDARDS

Warming cabinet meets applicable requirements of the following standards, and carries the appropriate symbols.

- **Underwriters Laboratories (UL) Standard 544** as certified by ETL Testing Laboratories, Inc.

- **Canadian Standards Association (CSA) Standard C22.2 No. 125**
- **Seismic Stress Calculations - California Administrative Code, Title 24**

The Selections Checked Below Apply to This Equipment

MODEL

- ☐ Single-Compartment
 - ☐ 18 inch (457 mm) deep
 - ☐ 24 inch (610 mm) deep

Mounting

- ☐ For Wall or Counter
- ☐ For Recessing
- ☐ Double Compartment
 - ☐ 18 inch (457 mm) deep
 - ☐ 24 inch (610 mm) deep

Mounting

- ☐ Freestanding
- ☐ For Recessing

ACCESSORY

- ☐ Seismic Tie-down Kit

NOTE: All cabinets are furnished with right hand hinge. Door swing is reversible in field.

Item _____

Location(s) _____

SECTION 2

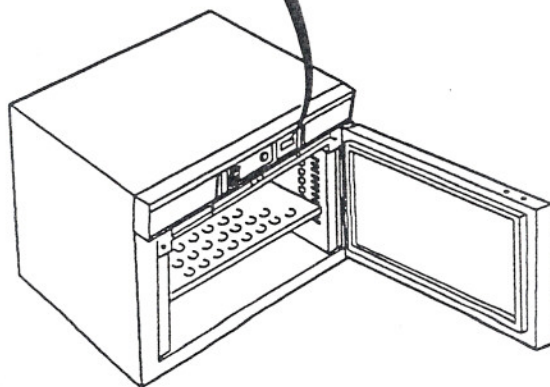
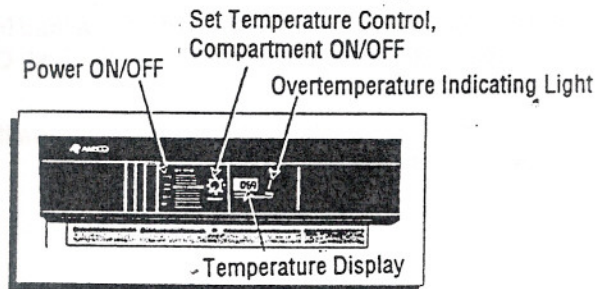
OPERATING INSTRUCTIONS

2.1 GENERAL

The following instructions are intended to guide maintenance personnel when: (1) instructing operators in techniques designed to insure optimum equipment performance; and (2) when verifying the validity of operator complaints. See Section 6, Troubleshooting, if the Warming Cabinet is not operating properly. Refer to Section 1, General Information, for capabilities of the equipment. If you are unfamiliar with this equipment, or you wish to review the principles by which the warming cabinet operates, you are urged to read Section 3, Principles of Operation, before beginning actual operation. Refer to Section 7, Component Repair and Adjustment, for service procedures and special features/adjustments.

2.2 COMPONENT IDENTIFICATION/FUNCTION

WARNING: BURN HAZARD: DO NOT EXCEED 150° F FOR NON-VENTED CLOSURES (screw caps, crimp seals, plastic pouches, etc.). Do not exceed presterile solution manufacturer's temperature requirements.



Single-Compartment

WARNING: BURN HAZARD: DO NOT RAISE SET TEMPERATURE TO INCREASE RATE OF HEATING. Allow approximately 6 hours for solutions to reach desired temperature.

WARNING: BURN HAZARD: DO NOT USE LIQUIDS ON - OR INJECT IN - LIVING TISSUE unless actual liquid temperature has been measured and is acceptable. Temperature of warming cabinet contents may be hotter than the displayed chamber air temperature. For patient safety, in accordance with good medical practice, always check liquid temperature prior to using.

Become familiar with all control locations and functions before operating the Warming Cabinet. Located behind the sliding control door are (Figure 2.1):

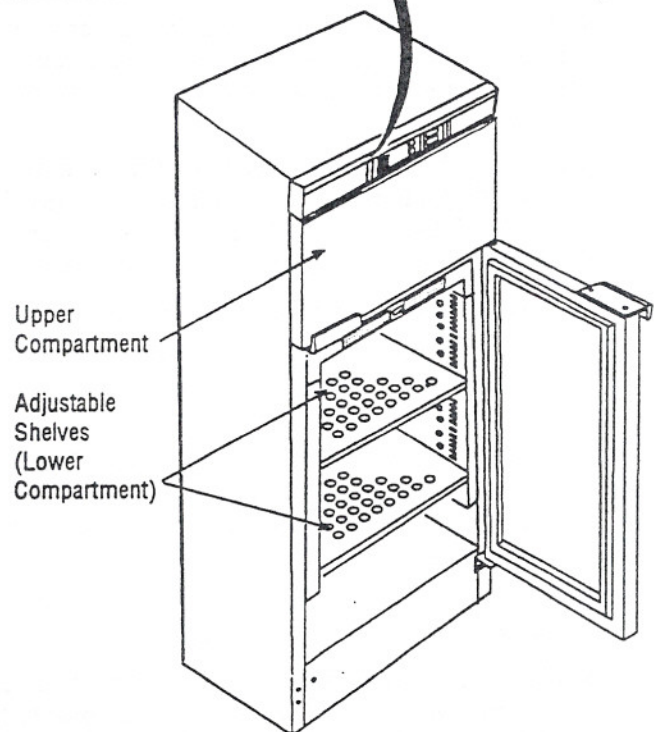
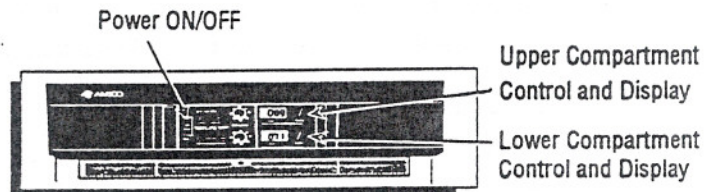


Figure 2-1. CONTROL LOCATIONS.

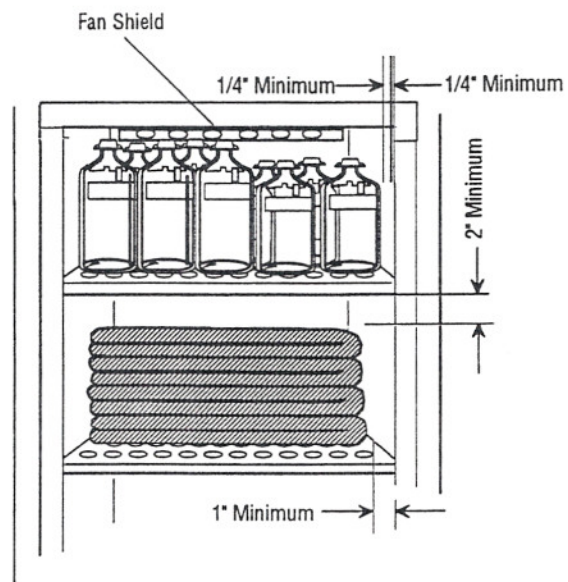


Figure 2-2. LOADING TECHNIQUES

SECTION 3

PRINCIPLES OF OPERATION

3.1 GENERAL

Warming Cabinets are designed to raise the temperature of surgical irrigation solutions and/or blankets to an acceptable level for hospital and surgical outpatient center applications.

This is achieved by circulating air warmed by heaters throughout the heating compartment.

3.2 CONTROL (Figure 3-1)

NOTE: Top compartment and bottom compartment are independently controlled and have identical controls. Principles apply to both top and bottom.

Turning on the Power Switch, CB1, powers up the 120 Volt control. LCD display will indicate the temperature of the compartment(s).

Desired temperature setting can be selected using the Temperature Control Knob. The knob is marked "OFF" and 90° F to 160° F in 10° F graduations.

Once the door is closed and a temperature is set, the door switch, LS1 (LS2 for lower compartment) is made, and CR1 relay energized. A set of normally open CR1 contacts will close, turning on the heaters and fan. The fan will not run if the temperature control knob is in "OFF" position or the heaters are off.

Temperature is monitored by an RTD in the compartment(s). Should the unit reach a temperature of 10° F higher than the set temperature, the overtemp switch will close in the temperature control, energizing CR2. Normally closed CR2 contacts will open, shutting off the heaters. Another set of CR2 contacts (normally open) will close, turning on the overtemperature lamp and buzzer. If the temperature exceeds 208° F (assuming the 10° F overtemp switch or CR2 relay fails), Thermal Fuse, TF1, will shut off the heaters.

Whenever the door is opened, both the heaters and fan will shut off.

SECTION 4

INSPECTION AND MAINTENANCE

4.1 GENERAL

Maintenance procedures described in this section should be performed at regular intervals, as indicated. The frequency, unless otherwise indicated, is determined by usage of the cabinet. Should a problem occur, refer to Section 6, Troubleshooting.

WARNING: INJURY HAZARD: TURN THE POWER SWITCH OFF AND ALLOW THE CHAMBER TO COOL before starting any maintenance operations.

WARNING: INJURY HAZARD: REPAIRS AND ADJUSTMENTS, other than those described in these instructions, should be attempted only by experienced mechanics fully acquainted with this equipment. Use of inexperienced, unqualified persons to work on the equipment or the installation of unauthorized parts could cause personal injury or result in costly damage.

NOTE: Control assembly removes freely from the cabinet for servicing. Sufficient counter space is required for servicing.

4.2 ROUTINE INSPECTION

1. Inspect cabinetry for signs of damage or misaligned parts.
2. Remove the control tray for access to electrical connections.
 - a. Check the electrical components for loose wires, improper connections and other obvious defects.
 - b. Replace the control tray.
3. Check the air-circulating fan for obvious defects.
 - a. Turn on the power switch.
 - b. Turn the temperature control knob just past "OFF" (approximately 90° F) and actuate the door switch and observe that the fan runs properly.
 - c. Turn the temperature control knob to "OFF" and turn off the power switch.
4. Open and close the door(s). Be sure that the hinges do not bind and that the gasket magnets do not roll.

5. Check the door gaskets for cracks or worn sections. Be sure that the gaskets are not brittle and that they uniformly adhere to the cabinet surfaces.

4.3 CLEANING

1. Use Amsco Stainless Steel Cleaner & Polish on all stainless-steel surfaces. Apply the cleaner with a damp cloth or sponge, thoroughly wipe the soiled surfaces and then polish with a clean, dry cloth. Use Amsco Pry Cleaner to remove stubborn stains.

CAUTION: When using Amsco Stainless Steel Cleaner & Polish or Amsco Pry Cleaner, rub in a back-and-forth motion (in the same direction as the surface grain). Do not rub with a rotary or circular motion. Do not use these cleaners on painted surfaces.

2. Use a mild detergent solution such as Amsco Sonic Detergent (P-41591-091) to wash non-stainless steel surfaces. Rinse with warm tap water using a sponge or damp cloth. Wipe dry with a lint free cloth.

4.4 MONTHLY

Oil the Door Hinges

1. Place a few drops of oil on the hinges. Use sparingly; excessive amounts might soil the cabinet.
2. Open and close the door(s) several times to work the oil into the hinges.
3. Wipe off excess oil.

SECTION 5

FIELD TEST PROCEDURE

5.1 GENERAL

Every Warming Cabinet must be tested and inspected according to this procedure. Keep a record of the test. Each test must meet the standards of the material, workmanship and performance set forth in this procedure. Refer to Section 7 should mechanical problems arise or adjustments be required.

5.2 TEST INSTRUMENTATION REQUIRED

1. Digital Multimeter
2. Calibrated digital thermometer (1°F resolution) with type "T" thermocouple.

5.3 VISUAL INSPECTION

1. Inspect cabinetry for complete, proper assembly and obvious imperfections; for example, dents, scratches, misalignment, etc.
2. Check the entire exposed surfaces for proper fit and finish, especially burrs, sharp edges and corners to which the user will be exposed.
3. Compare unit to order. Check style, number of compartments, finish, door swing, etc.
4. Operate the chamber doors. The doors should operate without hinge bind or rolling of magnetic gaskets. The gaskets should be free of cracks and tears. The gaskets should conform to the surface of the cabinet uniformly with no air gaps. Check the gasket for proper magnetic attraction. Metal shavings and filings should not be present on the unit, on the gasket, or in the chamber.
5. Check all electrical connections for obvious defects or loose parts.
6. Check for presence and correct location of warning and caution labels.

5.4 CHECK FOR PROPER INSTALLATION

1. Check that the cabinet is level side to side and front to back.
2. Open the door approximately 90°. Verify that the door stays in this position and does not swing further opened or closed.
3. Check for proper hook-up to required services.

5.5 FUNCTIONAL TEMPERATURE CHECKS

1. Install thermocouple inside chamber (upper if dual unit), approximately 5" below the center of the fan.
2. Turn the unit on. Verify the LCD agrees with the digital thermometer reading. (Approximately room temperature.) Set the heater control knob to approximately 140°F and allow the chamber to heat up. Verify that the LCD indicates a rise in temperature to match that of the digital thermometer. Verify that the fan runs. Run the chamber at set temperature for about 5-10 minutes or until temperature stabilizes. Observe the temperature on the display and the temperature on the digital thermometer. The two readings should agree within 5°F.
3. Turn the temperature control knob down to approximately 125°F. Observe that the overtemperature alarm (light and buzzer) comes on.
4. Verify heaters and fan shut off when door is opened.
5. Repeat the test for the lower chamber if a dual unit.

SECTION 6

TROUBLESHOOTING GUIDE

1. Use the operating procedure in Section 2 to verify the trouble symptom.
2. Refer to the Troubleshooting Chart (Table 6-1) after the symptom has been verified.
3. Use the operational descriptions and Electrical Schematic in Section 3 as aids in understanding system operation and how the malfunction of a specific component would affect it.

Use the Troubleshooting Chart as follows:

- TROUBLE - Select the problem you think is most appropriate to the particular trouble symptom.
- CAUSE/CORRECTION - This column lists specific conditions that should be checked to isolate and correct the one causing malfunction.

TABLE 6-1 TROUBLESHOOTING - WARMING CABINET

Trouble	Cause/Correction
1. Turn on Power Switch, no display.	<ul style="list-style-type: none">• Check for power to unit. Make sure P1 and DP1 are properly seated.• Control board bad, replace.• Display bad, replace.
2. Turn on Power Switch, select temperature, temperature displayed, fan runs, unit does not heat.	<ul style="list-style-type: none">• Open heaters, replace.• Bad control board, replace.• Relay CR1 contacts did not close.• Thermal Fuse open, replace.
3. Temperature on control knob and LCD do not agree after sufficient warm-up time.	<ul style="list-style-type: none">• Bad control board, replace.• Bad probe, replace.
4. Overtemperature Alarm when temperature is okay.	<ul style="list-style-type: none">• Bad probe, replace.• Bad control board, replace.• Bad CR2 relay, replace.
5. Overtemperature Alarm in the upper compartment.	<ul style="list-style-type: none">• Heat transfer from the lower compartment. Set the lower compartment no more than 30 degrees warmer than the upper compartment, or warm the higher temperature items in the upper compartment.

SECTION 7

COMPONENT REPAIR, REPLACEMENT AND ADJUSTMENT

7.1 GENERAL

This section includes instructions for the adjustment, disassembly and replacement of the major components of the Warming Cabinet. Exploded views showing the various parts and assemblies referred to in this section are included in Section 8.

WARNING: INJURY HAZARD: TURN THE POWER SWITCH OFF AND ALLOW CHAMBER TO COOL before starting any maintenance operation.

WARNING: INJURY HAZARD: REPAIRS AND ADJUSTMENTS, other than those described in these instructions, should be attempted only by experienced mechanics fully acquainted with this equipment. Use of inexperienced, unqualified persons to work on the equipment or the installation of unauthorized parts could cause personal injury or result in costly damage.

NOTE: Control assembly removes freely from the cabinet for servicing. Sufficient counter space is required for servicing.

7.2 CONTROL/HEATER ASSEMBLY REMOVAL

TURN OFF FACILITY POWER. USE PROPER LOCKOUT/TAGOUT PROCEDURES.

1. Open upper cabinet door.
2. Remove the two (2) socket head screws located on both sides of the air duct below the control assembly.
3. Slide out control/heater assembly approximately 4 inches, 1 inch prior to reaching stops.
4. Disconnect P1, power cord, from control/heater assembly. Disconnect RTD connections at control board.
5. Lift up on the front of assembly 1/2 inch and pull out control/heater assembly.

7.2.1 Circuit Breaker Removal/Replacement

1. Remove control/heater assembly per procedure 7.2.
2. Remove fast-on terminals, wires 4 and 1, from the circuit breaker (Figure 7-1).
3. Squeeze tabs on top and bottom of circuit breaker and slide out of control panel.

4. Install new circuit breaker. Re-attach wires 4 and 1. Reinstall control/heater assembly.

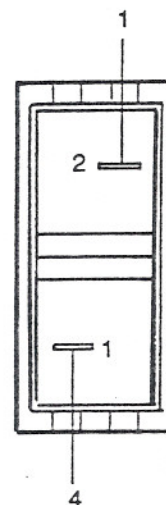


Figure 7-1. Circuit Breaker

7.2.2 Door Switch Removal/Replacement

1. Remove control/heater assembly per procedure 7.2.
2. Remove fast-on terminals, wires 5 and 4, from door switch (Figure 7-2), (note orientation of wires 5 and 4.)
3. Squeeze tabs on each side of the door switch and slide out front of control weldment.
4. Install new door switch. Re-attach wires 5 and 4. Reinstall control/heater assembly.

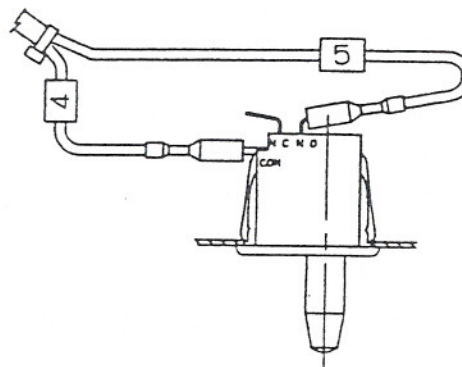
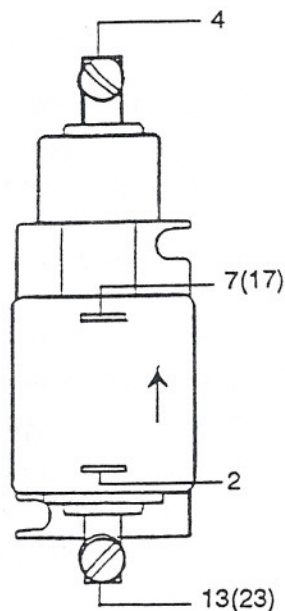


Figure 7-2. Door Switch

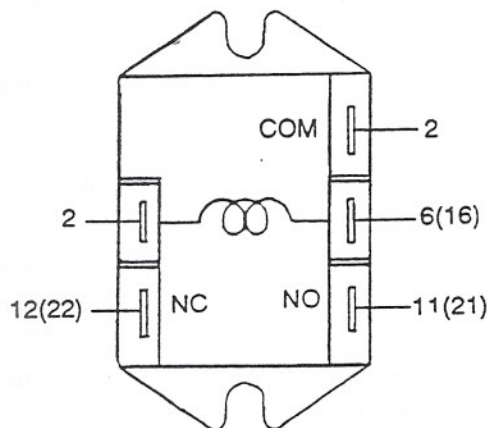


#'s in Parenthesis are for Lower Compartment

Figure 7-4. Mercury Relay

7.2.8 Overtemperature Control Relay Removal/Replacement

1. Remove control/heater assembly as per procedure 7.2.
2. Remove the five (5) wires (Figure 7-5); note orientation.
3. Remove two (2) screws securing overtemperature control relay to the control panel.
4. Install new overtemperature control relay . Reinstall wiring, reinstall control/heater assembly.



#'s in Parenthesis are for Lower Compartment

Figure 7-5. Overtemperature Control Relay

7.2.9 Audio Alarm Buzzer Removal/Replacement

1. Remove control/heater assembly as per procedure 7.2.
2. Note the orientation of two terminals connected to backside of buzzer (Figure 7-6), then remove.
3. Remove locking nut securing buzzer to mounting bracket, then remove buzzer from bracket.
4. Install new buzzer, reattach wires. Reinstall control/heater assembly.

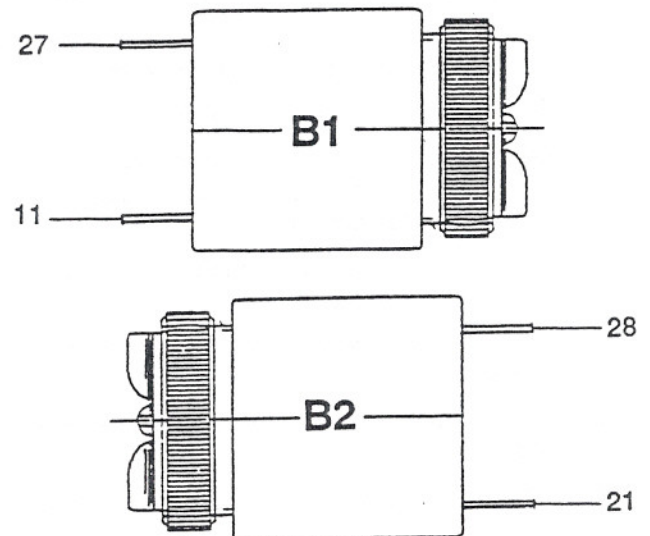


Figure 7-6. Audio Alarm Buzzer

7.2.10 Thermal Fuse Removal/Replacement

1. Remove control/heater assembly as per procedure 7.2.
2. Remove six (6) screws securing upper and lower halves of heater weldment.
3. Invert upper weldment to expose thermal fuse.
4. Remove fast-on terminals from thermal fuse.
5. Remove thermal fuse.
6. Install new thermal fuse, re-attach wires. Reinstall heater weldment and control/heater assembly.

7.3 DOOR GASKET REMOVAL/REPLACEMENT (UPPER AND LOWER DOORS)

1. Open door.
2. Remove all screws under the inside perimeter of the door gasket.
3. Remove inner panel and door gasket.
4. Install new door gasket around inner door panel.
5. Reinstall screws.

5. Remove the black wires #23 and #24 from the fuse.
6. Remove the thermal fuse.
7. Install new thermal fuse, reattach wires. Reassemble fan/heater assembly and reinstall back into cabinet.

SECTION 8

EXPLODED PARTS AND VIEWS

The following pages contain an illustrated parts breakdown. Assemblies and components are illustrated and identified as follows:

Single-Compartment
Assembly 18" Figure 8-1

Single-Compartment
Assembly 24" Figure 8-2

Double-Compartment
Assembly 18" Figure 8-3

Double-Compartment
Assembly 24" Figure 8-4

Single-Compartment
Door Assembly Figure 8-5

Double-Compartment
Door Assembly Figure 8-6

Single-Compartment
Control Figure 8-7

Double-Compartment
Control Figure 8-8

Single-Compartment
Heater Assembly Figure 8-9

Double-Compartment
Upper Heater Assembly Figure 8-10

Double-Compartment
Lower Heater Assembly Figure 8-11

Each list includes the part numbers, descriptions and quantities of parts required for a single Warming Cabinet. Subassembly components are indicated by indentation. The UNITS PER ASSEMBLY column is indicated by an "X".

HOW TO USE THE ILLUSTRATED PARTS BREAKDOWN

1. Determine the function and application of the part required. Check list of illustrations (above) and select the most appropriate title. Note the illustration page number.
2. Turn to the page indicated and locate the desired part on the illustration; note its index number.
3. Refer to the accompanying description for specific information regarding the part.

FIG. & INDEX NO.	PART NUMBER			S V C	DESCRIPTION	UNITS PER ASSEMBLY			
8-1-					SINGLE-COMPARTMENT ASSEMBLY				
					24 x 18" Counter Top Assembly	X			
					24 x 18" Recessed Assembly		X		
1	P	146655	173		WELDMENT, Shell	1	1		
2	P	146655	536		PANEL, Top	1			
3	P	129361	239		CLAMP	1	1		
4	P	93908	033		SCREW, Sems Mach. , #6-32x1/4" Lg.	1	1		
5	P	413720	306		RTD1 Temperature Probe	1	1		
6	P	93910	200		MAGNETIC STRIP	1	1		
7	P	146655	167		CONTROL PANEL ASSEMBLY (See Figure 8-7 and 8-9)	1	1		
9	P	93910	996		INSULATION, Side	2	2		
10	P	93910	994		INSULATION, Bottom	1			
11	P	93910	202		GASKET, Rec. Side	2	2		
12	P	93910	204		GASKET, Rec. Top	1	1		
13	P	93910	163		FOOT	4			
14	P	82675	001		SCREW, Ground , #10-32 x 3/8" Lg.	1	1		
15	P	129361	238		SCREW, Pan Hd., #8-32 x 1 1/4" Lg.	4			
16	P	129361	230		SCREW, Rnd. Hd., #8-32 x 1 1/8" Lg.	2	2		
17	P	430002	045		SCREW, Truss Hd. , #8-32 x 3/8" Lg.	15	8		
18	P	75498	061		SCREW, Truss Hd. , #10-32 x 3/4" Lg.	4			
19	P	129361	221		SCREW, Soc. But'n. Hd., #10-32 x 1/2" Lg.	4	4		
20	P	129361	191		NUT, Speed , #8-32	4			
21	P	33231	041		WASHER, Flat , #10 x 5/8" O.D.	4			
22	P	76801	045		WASHER, Lock , #10	3	3		
23	P	136807	409		DUCT	2	2		
24	P	146657	104		PANEL, Outer Side	2			
25	P	146655	546		LABEL, Warning Patient Burn Hazard)	1	1		
26	P	146655	529		PANEL, Bottom	1			
28	P	136807	415		HARNESS, Cabinet	1	1		
29	P	93910	198		MAGNETIC STRIP	2	2		
30	P	129361	229		SCREW, Truss Hd. , #8-32 x 3/4" Lg.	2			
31	P	431121	091		CLIP, Shelf	4	4		
32	P	136807	817		SHELF	1	1		
33	P	129352	069		NUT, Retain	2	2		
34	P	129361	165		BUSHING, Snap	2	2		
35	P	93908	034		SCREW, #6-32 x 1/2" Lg.	2	2		
Note: For breakdown of door assembly, see Figure 8-5.									

FIG. & INDEX NO.	PART NUMBER			S V C	DESCRIPTION	UNITS PER ASSEMBLY			
8-2-					SINGLE-COMPARTMENT ASSEMBLY				
					24 x 24" Counter Top Assembly	X			
					24 x 24" Recessed Assembly		X		
1	P	146655	172		WELDMENT, Shell	1	1		
2	P	146655	159		PANEL, Top	1			
3	P	129361	239		CLAMP	1	1		
4	P	93908	033		SCREW, Sems Mach. , #6-32x1/4" Lg.	1	1		
5	P	413720	306		RTD1 Temperature Probe	1	1		
6	P	93910	200		MAGNETIC STRIP	1	1		
7	P	146655	167		CONTROL PANEL ASSEMBLY (See Figure 8-7 and 8-9)	1	1		
9	P	93910	992		INSULATION, Side	2	2		
10	P	93910	954		INSULATION, Bottom	1			
11	P	93910	202		GASKET, Rec. Side	2	2		
12	P	93910	204		GASKET, Rec. Top	1	1		
13	P	93910	163		FOOT	4			
14	P	82675	001		SCREW, Ground , #10-32 x 3/8" Lg.	1	1		
15	P	129361	238		SCREW, Pan Hd. , #8-32 x 1 1/4" Lg.	4			
16	P	129361	230		SCREW, Rnd. Hd. , #8-32 x 1 1/8" Lg.	2	2		
17	P	430002	045		SCREW, Truss Hd., #8-32 x 3/8" Lg.	15	8		
18	P	75498	061		SCREW, Truss Hd. , #10-32 x 3/4" Lg.	4			
19	P	129361	221		SCREW, Soc. But'n. Hd., #10-32 x 1/2" Lg.	4	4		
20	P	129361	191		NUT, Speed, #8-32	4			
21	P	33231	041		WASHER, Flat , #10 x 5/8" O.D.	4			
22	P	76801	045		WASHER, Lock, #10	3	3		
23	P	136807	819		DUCT	2	2		
24	P	146657	101		PANEL, Outer Side	2			
25	P	146655	546		LABEL, Warning Patient Burn Hazard)	1	1		
26	P	146655	530		PANEL, Bottom	1			
28	P	136807	415		HARNESS, Cabinet	1	1		
29	P	93910	198		MAGNETIC STRIP	2	2		
30	P	129361	229		SCREW, Truss Hd. , #8-32 x 3/4" Lg.	2			
31	P	431121	091		CLIP, Shelf	4	4		
32	P	136807	441		SHELF	1	1		
33	P	129352	069		NUT, Retain	2	2		
34	P	129361	165		BUSHING, Snap	2	2		
35	P	93908	034		SCREW, #6-32 x 1/2" Lg.	2	2		
Note: For breakdown of door assembly, see Figure 8-5.									

FIG. & INDEX NO.	PART NUMBER		S V C	DESCRIPTION	UNITS PER ASSEMBLY			
8-3-		146655	541	DOUBLE-COMPARTMENT ASSEMBLY	X			
		146655	540	18 x 74" Freestanding Unit		X		
				18 x 74" Recessed Unit				
	1	P	129361	239 CLAMP	1	1		
	2	P	93908	033 SCREW, Sems Mach. , #6-32 x 1/4" Lg.	1	1		
	3	P	413720	306 RTD1 Temperature Probe	1	1		
	4	P	93910	203 GASKET, Rec. Side	2	2		
	5	P	93910	204 GASKET, Rec. Top	1	1		
	6	P	129361	229 SCREW, Truss Hd., #8-32 x 3/4" Lg.	2			
	7	P	146655	537 WELDMENT, Shell	1	1		
	8	P	146655	535 PANEL, Side	2			
	9	P	146655	536 PANEL, Top	1			
	10	P	136807	815 DUCT, 18"	2	2		
	11	P	136807	817 SHELF, 15" x 24"	3	3		
	12	P	431121	091 CLIP, Shelf	12	12		
	13	P	129361	193 SCREW, Pan Hd. , #8-32 x 1 1/4" Lg.	10			
	14	P	56401	040 PLUG, Nylon Hole	1	1		
	15	P	129361	165 BUSHING, Snap	4	4		
	16	P	93910	200 MAGNETIC STRIP	3	3		
	17	P	136807	416 WIRING HARNESS	1	1		
	18	P	146655	169 HEATER ASSEMBLY, Bottom (See Figure 8-11)	1	1		
	19	P	146655	168 CONTROL PANEL ASSEMBLY (See Figure 8-8 and 8-10)	1	1		
	20	P	430002	045 SCREW, Truss Hd., #8-32 x 3/8" Lg.	32	20		
	21	P	93910	213 PUSHBUTTON, Momentary	1	1		
	23	P	93910	993 INSULATION, Side	2	2		
	24	P	93910	994 INSULATION, Bottom and Front	3	3		
	25	P	129361	230 SCREW, Rnd. Hd. , #8-32 x 1 1/8" Lg.	2	2		
	26	P	129361	191 NUT, Speed , #8-32	5	5		
	27	P	19685	061 WASHER, Lock , #10	1	1		
	28	P	82675	001 SCREW, Ground , #10-32 x 3/8 "Lg.	1	1		
	29	P	129361	221 SCREW, Soc. But'n Hd. , 10-32 x 1/2" Lg.	11	11		
	30	P	136807	409 DUCT, Upper	2	2		
	32	P	146655	546 LABEL, Warning (Burn Hazard)	2	2		
	33	P	93910	198 MAGNETIC STRIP	2	2		
	34	P	93910	199 MAGNETIC STRIP	2	2		
	35	P	129352	069 NUT, Retainer	2	2		
	36	P	93911	051 RIVET, Snap	10	10		
	37	P	93908	034 SCREW, #6-32 x 1/2" Lg.	4	4		
Note: For breakdown of door assembly, see Figure 8-6.								

FIG. & INDEX NO.	PART NUMBER		S V C	DESCRIPTION	UNITS PER ASSEMBLY			
8-4-		146655	163	DOUBLE-COMPARTMENT ASSEMBLY	X	X		
		146655	162	24 X 74" Freestanding Unit				
				24 x 74" Recessed Unit				
	1	P	129361	239 CLAMP	1	1		
	2	P	93908	033 SCREW, Sems Mach., #6-32 x 1/4" Lg.	1	1		
	3	P	413720	306 RTD1 Temperature Probe	1	1		
	4	P	93910	203 GASKET, Rec. Side	2	2		
	5	P	93910	204 GASKET, Rec. Top	1	1		
	6	P	129361	229 SCREW, Truss Hd., #8-32 x 3/4" Lg.	2			
	7	P	146655	157 WELDMENT, Shell	1	1		
	8	P	146655	158 PANEL, Side	2			
	9	P	146655	159 PANEL, Top	1			
	10	P	136807	419 DUCT, 18"	2	2		
	11	P	136807	441 SHELF, 15" x 24"	3	3		
	12	P	431121	091 CLIP, Shelf	12	12		
	13	P	129361	238 SCREW, Pan Hd., #8-32 x 1 1/4" Lg.	10			
	14	P	56401	040 PLUG, Nylon Hole	1	1		
	15	P	129361	165 BUSHING, Snap	4	4		
	16	P	93910	200 MAGNETIC STRIP	3	3		
	17	P	136807	416 WIRING HARNESS	1	1		
	18	P	146655	169 HEATER ASSEMBLY, Bottom (See Figure 8-11)	1	1		
	19	P	146655	168 CONTROL PANEL ASSEMBLY (See Figures 8-8 and 8-10)	1	1		
	20	P	430002	045 SCREW, Truss Hd., #8-32 x 3/8" Lg.	32	20		
	21	P	93910	213 PUSHBUTTON, Momentary	1	1		
	23	P	93910	956 INSULATION, Side	2	2		
	24	P	93910	954 INSULATION, Bottom and Front	3	3		
	25	P	129361	230 SCREW, Rnd. Hd., #8-32 x 1 1/8" Lg.	2	2		
	26	P	129361	191 NUT, Speed, #8-32	5	5		
	27	P	19685	061 WASHER, Lock, #10	1	1		
	28	P	82675	001 SCREW, Ground, #10-32 x 3/8" Lg.	1	1		
	29	P	129361	221 SCREW, Soc. But'n Hd., 10-32 x 1/2" Lg.	11	11		
	30	P	136807	819 DUCT, Upper	2	2		
	32	P	146655	546 LABEL, Warning (Burn Hazard)	2	2		
	33	P	93910	198 MAGNETIC STRIP	2	2		
	34	P	93910	199 MAGNETIC STRIP	2	2		
	35	P	129352	069 NUT, Retainer	2	2		
	36	P	93911	051 RIVET, Snap	10	10		
	37	P	93908	034 SCREW, #6-32 x 1/2" Lg.	4	4		
Note: For breakdown of door assembly, see Figure 8-6.								

FIG. & INDEX NO.	PART NUMBER			S V C	DESCRIPTION	UNITS PER ASSEMBLY			
8-5-					SINGLE-COMPARTMENT DOOR ASSEMBLY				
	1	P	136807	401	DOOR ASSEMBLY	1			
	2	P	93910	151	• GASKET, Door	1			
	3	P	78881	045	• SCREW, Self Tapping	14			
	4	P	136807	402	• PLATE, Inner Door	1			
	5	P	93910	152	• HONEY COMB	1			
	6	P	136807	403	• WELDMENT, Door	1			
	7	P	24545	061	SCREW, C'Sink, #10-32 x 3/8" Lg.	2			
	8	P	136807	880	HANDLE	1			
	9	P	93910	212	SUPPORT HANDLE	1			
	10	P	46123	043	SCREW, C'Sink Soc. Fl. Hd., #10-32 x 1/2" Lg.	4			
	11	P	93911	051	RIVET, Snap	2			
	12	P	452446	091	PIN, Pivot	2			
	13	P	83461	001	WASHER, Flat Nylon	2			
	14	P	136807	433	HINGE, Top	2			
	15	P	129361	194	SHIM, Top Hinge	10			
	16	P	136807	878	HINGE, Bracket	1			
	17	P	76801	045	WASHER, Cock	2			
	18	P	16451	042	SCREW, Soc. Ad. Cap, #10-32 x 5/8" Lg.	2			

FIG. & INDEX NO.	PART NUMBER			S V C	DESCRIPTION	UNITS PER ASSEMBLY			
8-6-					DOUBLE-COMPARTMENT DOOR ASSEMBLY				
	1	P	136807	401	DOOR ASSEMBLY, Top	1			
	2	P	93910	151	• GASKET, Door	1			
	3	P	78881	045	• SCREW, Self Tapping	14			
	4	P	136807	402	• PLATE, Inner Door	1			
	5	P	93910	152	• HONEY COMB	1			
	6	P	136807	403	• WELDMENT, Door	1			
	7	P	136807	406	DOOR ASSEMBLY, Bottom	1			
	8	P	93910	162	• GASKET, Door	1			
	9	P	136807	405	• PLATE, Inner Door	1			
	10	P	93910	156	• HONEY COMB	1			
	11	P	136807	404	• WELDMENT, Door	1			
	12	P	78881	045	• SCREW, Self Tapping	14			
	13	P	46123	043	SCREW, C'Snk Sock. Fl.Hd., #10-32 x 1/2" Lg.	10			
	14	P	24545	061	SCREW, C'Sink, #10-32 x 3/8" Lg.	4			
	15	P	93910	212	SUPPORT HANDLE	2			
	16	P	136807	880	HANDLE	2			
	17	P	452446	091	PIN, Pivot	2			
	18	P	93910	957	PIN, Pivot	1			
	19	P	83461	001	WASHER, Flat Nylon	5			
	20	P	129361	221	SCREW, Soc. But'n Hd., #10-32 x 1/2" Lg.	11			
	21	P	136807	876	BRACKET, Hinge	2			
	22	P	129361	199	SHIM, Bracket Hinge	10			
	23	P	129361	194	SHIM, Top Hinge	10			
	24	P	136807	433	HINGE, Top	2			
	25	P	93911	051	RIVET, Snap	1			

FIG. & INDEX NO.	PART NUMBER			S V C	DESCRIPTION	UNITS PER ASSEMBLY			
8-7-					SINGLE-COMPARTMENT CONTROL				
1	P	146655	548		WIRING HARNESS	1			
2	P	146655	164		CONTROL PANEL	1			
3	P	136807	887		CONTROL BOX	1			
4	P	136807	885		CONTROL, Door	1			
5	P	93910	988		CIRCUIT BREAKER	1			
6	P	93910	959		LIGHT, Warning	2			
7	P	129361	225		PLATE, Mounting	1			
9	P	93910	963		RELAY	1			
10	P	136807	891		CONTROL BOARD	1			
11	P	93910	964		DISPLAY	1			
12	P	93911	056		SCREW, Sems Mach.	4			
13	P	93911	057		SCREW, Sems Mach.	8			
14	P	93910	970		LABEL, Operating	1			
15	P	93910	971		LABEL, Display	1			
16	P	93910	980		LABEL, Door	1			
17	P	93910	215		MAGNETIC STRIP	2			
18	P	93908	034		SCREW, Sems Mach.	2			
19	P	93910	999		MARKER, Terminal	1			
20	P	82675	001		SCREW, Ground	1			
21	P	93908	033		SCREW, Sems Mach.	16			
22	P	129361	223		PLATE, Mounting	1			
23	P	93910	965		POTENTIOMETER	1			
24	P	93910	969		KNOB	1			

FIG. & INDEX NO.	PART NUMBER			S V C	DESCRIPTION	UNITS PER ASSEMBLY			
8-8-					DOUBLE-COMPARTMENT CONTROL				
1	P	146655	547		WIRING HARNESS	1			
2	P	146655	164		CONTROL PANEL	1			
3	P	136807	887		CONTROL BOX	1			
4	P	136807	885		CONTROL, Door	1			
5	P	93910	966		CIRCUIT BREAKER	1			
6	P	93910	959		LIGHT, Warning	2			
7	P	129361	225		PLATE, Mounting	1			
9	P	93910	963		RELAY	1			
10	P	136807	891		CONTROL BOARD <i>P. 764.326-670</i>	1			
11	P	93910	964		DISPLAY	1			
12	P	93910	215		STRIP, Magnetic	2			
13	P	93911	056		SCREW, Sems Mach.	4			
14	P	93911	057		SCREW, Sems Mach.	8			
15	P	93910	972		LABEL, Operating	1			
16	P	93910	973		LABEL, Display	1			
17	P	93910	980		LABEL, Door	1			
18	P	82675	001		SCREW, Ground	1			
19	P	93908	034		SCREW, Sems Mach.	2			
20	P	93910	999		MARKER, Terminal	1			
21	P	93908	033		SCREW, Sems Mach.	16			
22	P	129361	223		PLATE, Mounting	1			
23	P	93910	965		POTENTIOMETER	1			
24	P	93910	969		KNOB	1			

FIG. & INDEX NO.	PART NUMBER			S V C	DESCRIPTION	UNITS PER ASSEMBLY			
8-9-					SINGLE-COMPARTMENT HEATER ASSEMBLY				
1	P	136807	407		PLATE, Baffle	1			
2	P	136807	890		FAN, Blower	1			
3	P	136807	886		COVER, Blower	1			
4	P	136807	882		HEATER ROD	1			
5	P	129361	169		CLAMP	4			
6	P	93910	214		THERMOFUSE	1			
7	P	146655	527		PLATE, Control	1			
8	P	93910	968		BUZZER	1			
9	P	93910	213		PUSHBUTTON	1			
10	P	136807	888		BRACKET, Mounting	1			
11	P	136807	889		BRACKET, Mounting	1			
12	P	129361	154		STANDOFF, Ceramic	4			
13	P	93908	033		SCREW, Sems Mach.	16			
14	P	93908	040		SCREW, Sems Mach.	8			
15	P	93908	036		SCREW, Sems Mach.	15			
16	P	430015	045		NUT, Keps, #8-32	9			
17	P	93910	961		BUSHING	2			
18	P	48982	045		NUT, Speed	7			
19	P	93910	977		LABEL, Warning	1			
20	P	93910	978		LABEL, Warning	1			
21	P	93910	962		RELAY, Mercury	1			

FIG. & INDEX NO.	PART NUMBER			S V C	DESCRIPTION	UNITS PER ASSEMBLY			
8-10-					DOUBLE-COMPARTMENT UPPER HEATER ASSEMBLY				
1	P	136807	407		PLATE, Baffle	1			
2	P	136807	890		FAN, Blower	1			
3	P	136807	886		COVER, Blower	1			
4	P	136807	882		HEATER ROD	1			
5	P	129361	169		CLAMP	4			
6	P	93910	214		THERMOFUSE	1			
7	P	146655	527		PLATE, Control	1			
8	P	93910	968		BUZZER	1			
9	P	93910	213		PUSHBUTTON	1			
10	P	136807	888		BRACKET, Mounting	1			
11	P	136807	889		BRACKET, Mounting	1			
12	P	129361	154		STANDOFF, Ceramic	4			
13	P	93908	033		SCREW, Sems Mach.	16			
14	P	93908	040		SCREW, Sems Mach.	8			
15	P	93908	036		SCREW, Sems Mach.	15			
16	P	430015	045		NUT, Keps, #8-32	9			
17	P	93910	961		BUSHING	2			
18	P	48982	045		NUT, Speed	7			
19	P	93910	977		LABEL, Warning	1			
20	P	93910	978		LABEL, Warning	1			
21	P	93910	962		RELAY, Mercury	2			

FIG. & INDEX NO.	PART NUMBER			S V C	DESCRIPTION	UNITS PER ASSEMBLY			
8-11-					DOUBLE-COMPARTMENT LOWER HEATER				
1	P	146655	165		PLATE, Control	1			
2	P	136807	886		COVER, Blower.....	1			
3	P	136807	890		FAN, Blower	1			
4	P	136807	882		HEATER ROD	1			
5	P	129361	169		CLAMP	4			
6	P	93910	214		THERMOFUSE	1			
7	P	129361	154		STANDOFF, Ceramic	4			
8	P	136807	892		PLATE, Baffle	1			
9	P	93910	961		BUSHING	2			
10	P	93908	033		SCREW, Sems Mach.	2			
11	P	93908	040		SCREW, Sems Mach.	8			
12	P	93908	036		SCREW, Sems Mach.	6			
13	P	430015	045		NUT, Keps	9			
14	P	48982	045		NUT, Speed	6			
15	P	93910	977		LABEL, Warning	1			
16	P	93910	978		LABEL, Warning (Explosion Hazard)	1			
17	P	82675	001		SCREW, Ground	1			
18	P	418335	307		HOUSING, Contact	1			
19	P	136807	805		INSULATION.....	2			